

Claims

1. A method for applying an aqueous solution to the internal walls of a reactor for polymerizing vinyl chloride and/or vinyl acetate, which aqueous solution contains a salt of an anti-scaling agent which comprises a product of condensation of an aldehyde, a phenolic compound and an aromatic carboxylic acid hydroxylated at the aromatic nucleus, the method being characterized in that the pH-value of this aqueous solution is changed to a pH-value of less than 5.
2. A method according to claim 1, characterized in that the pH-value of the aqueous solution is changed to a pH-value in the range between 2.5 and 4.5.
3. A method according to claim 1, characterized in that the salt of the anti-scaling agent is an alkali metal and/or alkaline earth metal salt, preferably sodium.
4. A method according to claims 1 to 3, characterized in that the pH-value is changed to those values by means of acidification with an aqueous solution of an organic and/or inorganic acid.
5. A method according to claim 4, characterized in that the acid is selected from citric, oxalic, tartaric, hydrochloric, nitric and/or sulphuric acid, preferably citric acid.
6. A method according to claims 4 and 5, characterized in that the aqueous solution contains from 1 to 10% by weight citric acid, preferably 5%.
7. A method according to claims 1 to 6, characterized in that the aqueous solution which contains the salt of the anti-scaling agent and the aqueous solution of the organic and/or inorganic acid are mixed with each other before the polymerization reaction.

8. A method according to claim 7, characterized in that the aqueous solution which contains the salt of the anti-scaling agent and the aqueous solution of the organic and/or inorganic acid are mixed with each other before being applied to the internal walls of the polymerization reactor.

9. A method according to claim 8, characterized in that the mixture thereby obtained is applied to the internal walls of the polymerization reactor in a stream of vapour.

10. A method according to claim 9, characterized in that the aqueous solution thereby obtained is applied to the internal walls of the polymerization reactor at a pressure in the range between 2 and 20 bar.

11. A method according to claim 10, characterized in that the aqueous solution thereby obtained is applied to the internal walls of the polymerization reactor for a period of time of from 15 to 45 seconds.

12. A method according to claim 7, characterized in that the aqueous solution which contains the salt of the anti-scaling agent and the aqueous solution of the organic and/or inorganic acid are mixed with each other on the wall.

13. A method according to claim 1, characterized in that the aldehyde is formaldehyde, the phenolic compound is 1-naphthol and the aromatic carboxylic acid hydroxylated at the aromatic nucleus is 2,4-dihydroxybenzoic acid.

14. A method according to claim 1, characterized in that the anti-scaling agent is EVERCLEAN® 104NS.

15. A method according to claim 1, characterized in that the aqueous solution contains 4-8% by weight of the alkali metal and/or alkaline earth metal salt of the anti-scaling agent.

16. A method according to claim 1, characterized in that the aqueous solution has a pH-value in the range between 7 and 12.4.